

## CLAIMS

What is claimed is:

1. A mandrel for a gas lift valve (15) which comprises an elongated body, provided with means of connection at its ends, said body provided with a lateral side pocket, (17) and a side receptacle (16) the interior of which is able to house a gas lift valve (13) which injects gas into the interior of the body of the mandrel for the gas lift valve (15) by way of orifices (22) positioned in a nose (18), the mandrel for the gas lift valve (15) characterized by, additionally comprising:

a lower body (23) provided in the lower part of the receptacle for the valve (16) of the side pocket mandrel (15), in that said lower body (23) is configured in a manner to seal the lower part of the valve receptacle (16) to form a chamber (24);

in that the lower body (23) is provided with at least one injection orifice to inject gas into the interior of the body of the mandrel for gas lift valve (15).

2. Mandrel according to claim 1, wherein said at least one injection orifice comprises a single injection orifice (25).

3. Mandrel according to claim 1, wherein said at least one injection orifice comprises a single injection orifice (25), which directs the flow of gas provided by the chamber (24) in a direction tangential to the internal surface of the body of the mandrel for the gas lift valve.

4. Mandrel according to claim 1, wherein said at least one injection orifice comprises a plurality of injection orifices (28).

5. Mandrel according to claim 1, wherein said at least one injection orifice comprises a plurality of injection orifices (28), which direct the flow of gas provided by the chamber (24) in a direction tangential to the internal surface of the body of the mandrel of said gas lift valve (15).

6. Mandrel according to claim 1, wherein said at least one injection orifice comprises a plurality of injection orifices (28), so that part of these injection orifices (28) direct the flow of gas provided by the chamber (24) in a direction tangential to the internal surface of the body of the mandrel of said gas lift valve (15) and the remaining injection orifices (28) direct the flow of gas provided by the chamber (24) to the central region of the mandrel of said gas lift valve (15).

7. Mandrel according to any one of claims 4 to 6, wherein the injection orifices of the said plurality of openings (28) are able to have distinct geometrical shapes.

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8. Mandrel according to any one of claims 1 to 7, wherein the gas lift valve (13) is additionally provided with a superior longitudinal opening for injection (29), positioned at the upper end of the body (14) of the gas lift valve (13), through which gas is injected into the interior of the body of the mandrel for the gas lift valve (15).